TWO NEW RACES OF THE PIGMY OWL FROM THE PACIFIC COAST.

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(Contribution from the Museum of Vertebrate Zoölogy of the University of California.)

STUDENTS of Californian birds have long been aware of the existence within this state of two readily distinguishable races of the Pigmy Owl. One inhabits the humid coast belt south to Monterey County, the other occupies the relatively much more arid Sierra Nevada, and mountain ranges of southern California. The first-indicated subspecies has borne the none Glaucidium gnoma californicum; the second, having been assumed to be the same as the Rocky Mountain bird, was called, in common with the latter, Glaucidium gnoma gnoma.

Beyond a haunting suspicion that the Californian interior bird might prove different, upon comparison of actual specimens, from that of the Rocky Mountain region, the situation remained unchanged until, in 1910, E. W. Nelson (Proc. Biol. Soc. Wash., Vol. XXIII, p. 103) named the Rocky Mountain Pigmy Owl as distinct from the true G. g. gnoma at the southern end of the Mexican Tableland. The northern bird received the name Glaucidium gnoma pinicola. In Nelson's description of it comparison is made with not only true gnoma but also with californicum, the latter name being clearly used for the small, reddish-brown humid coast race.

These comparative remarks at once aroused a query as to the relationships of the Californian interior bird; and the writer forwarded to Mr. Nelson two southern California specimens for critical examination. These he pronounced to be not his G. g. pinicola, but probably representative of a distinct new subspecies. Since the only question in the writer's mind was in regard to the distinctness between the Californian interior race and Nelson's pinicola of the Rocky Mountains, the course of action seemed to be perfectly clear, that is, to formally name the southern California

bird. It would have been more proper for Mr. Nelson himself to have described the race, in view of his work in the genus; but claiming to be engrossed with work upon newly arrived Central American material, he courteously insisted upon the writer's assuming the not distasteful function of describer.

In order that comparisons in both directions might be verified, seven examples of *G. g. pinicola* from the Biological Survey collection were, through the kindness of Mr. H. W. Henshaw, forwarded to the writer as a loan. These, together with the west coast material in the California Museum of Vertebrate Zoölogy and in the private collections of F. S. Daggett, H. S. Swarth and J. Grinnell, form the basis for the following characterizations.

The assembling of this material unexpectedly pointed to the expediency of further nomenclatural action. Mr. H. S. Swarth has already pointed out (Univ. Calif. Publ. Zool., Vol. 10, 1912, pp. 31, 32) the peculiarity in coloration of four Pigmy Owls from Vancouver Island. There now seem to be sufficient grounds for recognizing an extreme northern humid coast race, the range of which is to be split off from that previously accorded to G, g, californicum. The latter name is thus restricted to the subspecies inhabiting the coast belt from Washington to central California.

Close study has resulted in the conclusion that there is a dependably constant tone of coloration in Pigmy Owls from any one faunal area, in other words that much of the variation which strikes one at first glance as being extraordinary, is accounted for by difference in wear and age. Only adults have the top of head uniform in shade with the dorsum, juvenals, even though full-grown and full-feathered, having the top of the head slate gray of varying shades conspicuously contrasted with the brownish of the back. The writer is unable to find any so-called "phases" of coloration in this species.

The designation of three forms of Glaucidium from the Pacific Coast district may seem a surprising innovation to some, but it is nothing more than might be expected after a review of the facts as already worked out in other genera of resident birds. The reader should recall the present systematic treatment throughout the same area, of Bubo, Otus, Dryobates, Cyanocitta, Certhia, and Thryomanes.

Glaucidium gnoma vigilante, new subspecies.

SIERRA PIGMY OWL.

Type.— \circ ad., no. 379, coll. J. Grinnell; foothills at 2250 ft. alt., 4 miles north of Pasadena, Los Angeles County, California; February 18, 1894; collected by J. Grinnell.

DIAGNOSIS.— Nearest like Glaucidium g. californicum, but size slightly larger and coloration much paler, broccoli brown dorsally and laterally, instead of warm russet brown; light markings slightly more increased in extent. Differs from G. g. pinicola in smaller size, and distinctly browner coloration; white flecks on back circular in shape rather than of transverse trend.

DISTRIBUTION.— Mountain ranges of southern California, and southern Sierra Nevada, at least from Bear Valley, San Bernardino County, north to Lindsay, Tulare County (probably throughout the Sierra Nevada north to Mount Shasta).

Glaucidium gnoma swarthi, new subspecies.

VANCOUVER PIGMY OWL.

Type.— \circ ad., no. 15637, Calif. Mus. Vert. Zool.; Errington, Vancouver Island, British Columbia; September 11, 1910; collected by H. S. Swarth.

DIAGNOSIS.— Nearest like Glaucidium g. californicum, but much darker colored throughout, inclining to bistre dorsally, and white markings much reduced in extent; feet and legs heavily suffused with sepia; streaking below nearly black; size as in californicum. Differs from G. g. pinicola in smaller size, very much darker and browner coloration, and restriction of light markings; the remnants of the latter are pervaded with deep clay color.

DISTRIBUTION.— Vancouver Island (and, probably, adjacent mainland of British Columbia and coast belt of Washington).

REMARKS.— The name selected for the subspecific appellation of this new race serves as a merited means of signalizing the painstaking field and systematic research devoted to northwest coast ornithology by Mr. Harry S. Swarth during his incumbency as Curator of Birds in the California Museum of Vertebrate Zoology.

MEASUREMENTS.

- G. gnoma pinicola, ♀, no. 203634, U. S. Nat. Mus., Jamez Mts., New Mexico: Wing 105 mm., tail 79, tarsus 23.
 - G. anoma vigilante, \circ , type: Wing 96.4, tail 73, tarsus 20.8.
- G. gnoma californicum, ♀, no. 4396, Calif. Mus. Vert. Zool., Marin County, California: Wing 93.4, tail 65, tarsus 20.7.
 - G. gnoma swarthi, Q, type. Wing 92.3, tail 67.7, tarsus 20.